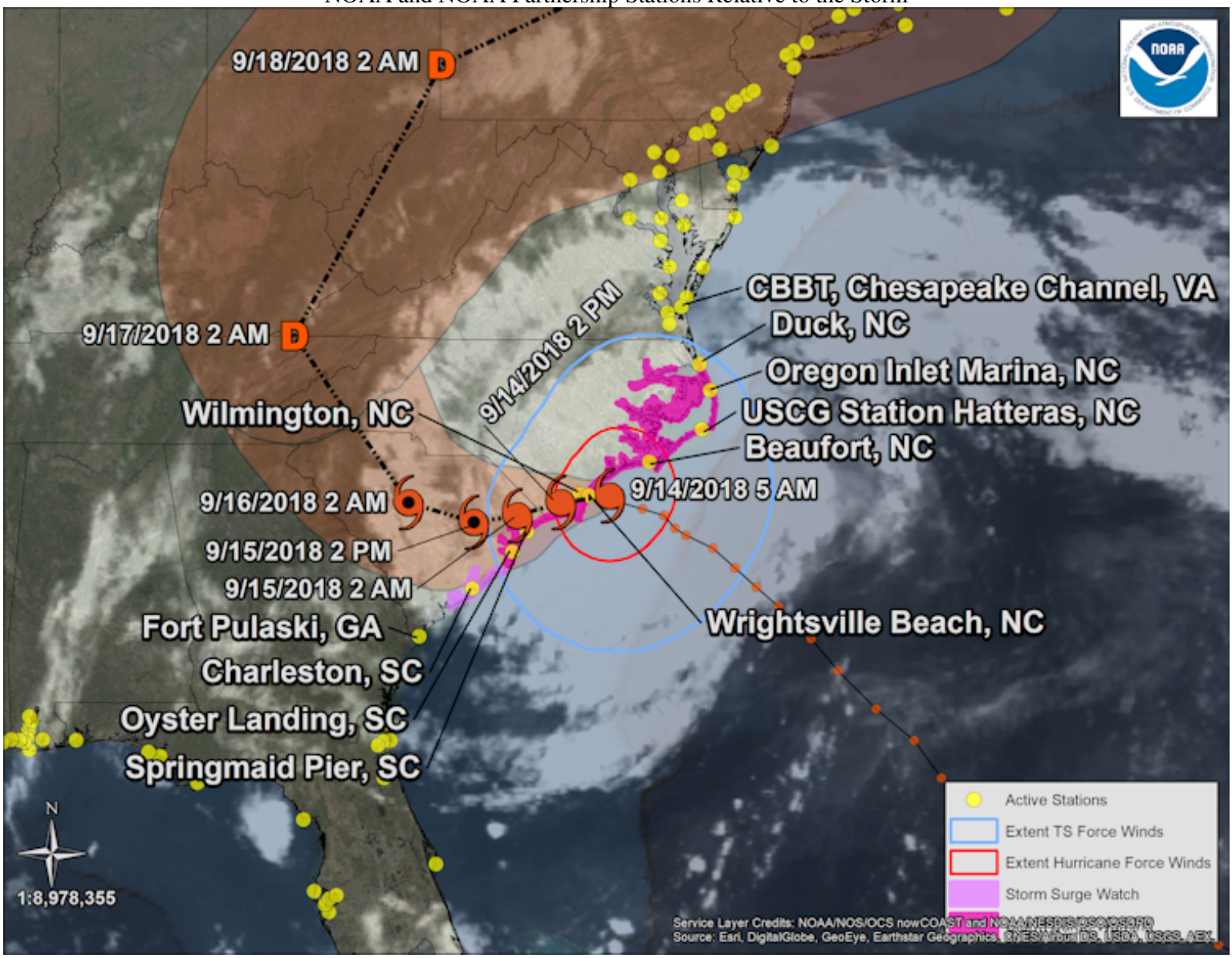
Hurricane Florence QuickLook
Posted: 06:00 EDT 09/14/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/14/2018 06:00 EDT, water levels along the North and South Carolina coast continue to be impacted by Hurricane Florence. On the Atlantic coast, water levels from Wrightsville Beach to Chesapeake Bay entrance are between 1.5 and 5.0 feet above normal tide levels with the highest values above tide being observed at Beaufort, NC. Within Pamlico Sound, stations at USCG Hatteras, NC and Oregon Inlet Marina, NC have been measuring below normal tide levels, however water levels at Hatteras are beginning to rapidly rise. Ahead of the storm, water levels at

Springmaid Pier, SC and Oyster Landing, SC have begin to drop below normal tide levels with persistent offshore flow.

Winds from Wrightsville Beach to Chesapeake Bay Entrance range between 20 and 50 knots with the strongest winds at Wrightsville Beach and Beaufort, NC where gusts up to 70 knots have been measured. Barometric pressure is rapidly dropping at Wrightsville Beach but has begun to rise at Beaufort.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional real-time and historical inundation information for select stations affected by this storm, please visit Coastal Inundation Dashboard. For additional data, please see the Center for Operational Oceanographic Products & Services website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: PFF

Select National Hurricane Center Advisory:

Hurricane Florence Advisory Number 60
NWS National Hurricane Center Miami FL AL062018
500 AM EDT Fri Sep 14 2018

...FLORENCE ABOUT TO MAKE LANDFALL IN NORTH CAROLINA...
...CAUSING LIFE-THREATENING STORM SURGES AND HURRICANE-FORCE WINDS...
...CATASTROPHIC FRESHWATER FLOODING EXPECTED OVER PORTIONS OF NORTH AND SOUTH CAROLINA...

SUMMARY OF 500 AM EDT...0900 UTC...INFORMATION

LOCATION...34.2N 77.4W
ABOUT 25 MI...35 KM E OF WILMINGTON NORTH CAROLINA
ABOUT 55 MI...85 KM SW OF MOREHEAD CITY NORTH CAROLINA
MAXIMUM SUSTAINED WINDS...90 MPH...150 KM/H
PRESENT MOVEMENT...WNW OR 285 DEGREES AT 6 MPH...9 KM/H
MINIMUM CENTRAL PRESSURE...958 MB...28.29 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...
* South Santee River South Carolina to Duck North Carolina
* Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers

A Storm Surge Watch is in effect for...
* Edisto Beach South Carolina to South Santee River South Carolina

A Hurricane Warning is in effect for...
* South Santee River South Carolina to Duck North Carolina
* Albemarle and Pamlico Sounds

A Hurricane Watch is in effect for...
* Edisto Beach South Carolina to South Santee River South Carolina

A Tropical Storm Warning is in effect for...
* North of Duck North Carolina to Cape Charles Light Virginia
* Chesapeake Bay south of New Point Comfort
* Edisto Beach South Carolina to South Santee River South Carolina

Interests elsewhere in the southeastern and mid-Atlantic states should monitor the progress of Florence.

A Storm Surge Warning means there is a danger of life-threatening inundation, from rising water moving inland from the coastline. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov.

A Storm Surge Watch means there is a possibility of life- threatening inundation, from rising water moving inland from the coastline.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area, in this case within the next 24 hours.

A Hurricane Watch means that hurricane conditions are possible within the watch area.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

DISCUSSION AND OUTLOOK

At 500 AM EDT (0900 UTC), the center of the eye of Hurricane Florence was located by an Air Force Hurricane Hunter aircraft and NOAA Doppler radar near latitude 34.2 North, longitude 77.4 West. Florence is moving toward the west-northwest near 6 mph (9 km/h). A turn toward the west at a slow forward speed is expected today, followed by a slow west-southwestward motion tonight and Saturday. On the forecast track, the center of Florence is expected to move inland across extreme southeastern North Carolina and extreme eastern South Carolina today and Saturday. Florence will then move generally northward across the western Carolinas and the central Appalachian Mountains early next week.

Maximum sustained winds remain near 90 mph (150 km/h) with higher gusts. Gradual weakening is forecast later today and tonight. Significant weakening is expected over the weekend and into early next week while Florence moves farther inland.

Hurricane-force winds extend outward up to 80 miles (130 km) from the center and tropical-storm-force winds extend outward up to 195 miles (315 km). A NOAA observing site at Cape Lookout, North Carolina, recently reported a sustained wind of 72 mph (116 km/h) and a gust of 90 mph (145 km/h).

The minimum central pressure estimated from Hurricane Hunter data is 958 mb (28.29 inches).

HAZARDS AFFECTING LAND

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water has the potential to reach the following heights above ground...

Cape Fear NC to Cape Lookout NC...7-11 ft, with locally higher amounts in the Neuse, Pamlico, Pungo, and Bay Rivers
Cape Lookout NC to Ocracoke Inlet NC...6-9 ft
South Santee River SC to Cape Fear NC...4-6 ft
Ocracoke Inlet NC to Salvo NC...4-6 ft
Salvo NC to Duck NC...2-4 ft
Edisto Beach SC to South Santee River SC...2-4 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Florence is expected to produce heavy and excessive rainfall in the following areas...

Southeastern coastal North Carolina into far northeastern South Carolina...an additional 20 to 25 inches, with isolated storm totals of 30 to 40 inches. This rainfall will produce catastrophic flash flooding and prolonged significant river flooding.

Remainder of South Carolina and North Carolina into southwest Virginia...5 to 10 inches, isolated 15 inches. This rainfall will produce life-threatening flash flooding.

TORNADOES: A few tornadoes are possible in eastern North Carolina today.

SURF: Swells generated by Florence are affecting Bermuda, portions of the U.S. East Coast, and the northwestern and central Bahamas. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

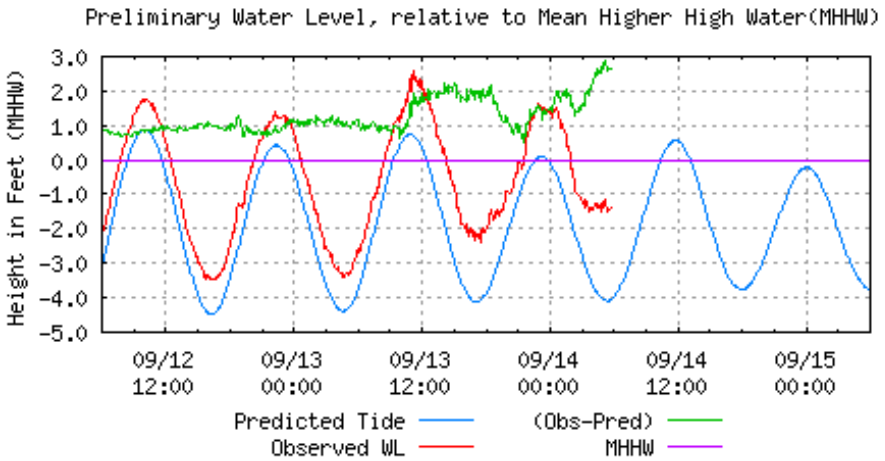
NEXT ADVISORY

Next intermediate advisory at 800 AM EDT.
Next complete advisory at 1100 AM EDT.

$$
Forecaster Pasch

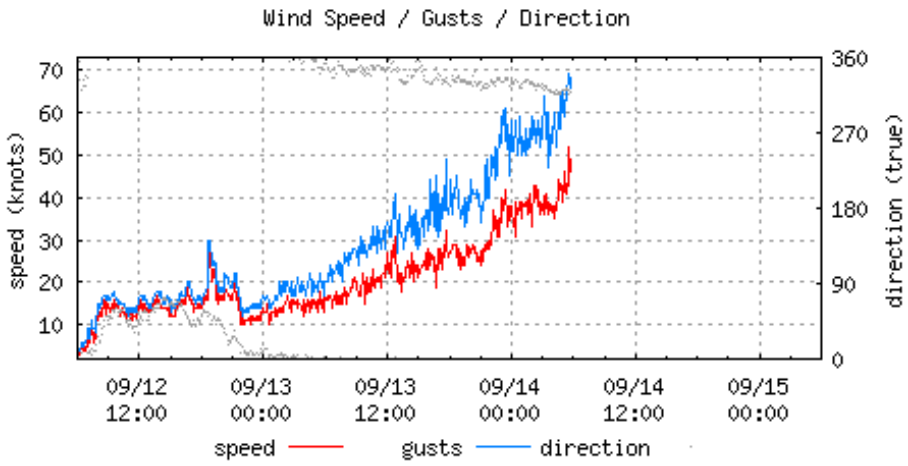
Jump to: Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Beaufort, Duke Marine Lab - Water Level, Beaufort, Duke Marine Lab - Winds, Beaufort, Duke Marine Lab - Barometric, Duck - Water Level, Duck - Winds, Duck - Barometric, CBBT, Chesapeake Channel - Water Level, CBBT, Chesapeake Channel - Winds, CBBT, Chesapeake Channel - Barometric, Wilmington - Water Level, Wilmington - Barometric, USCG Station Hatteras - Water Level, USCG Station Hatteras - Winds, USCG Station Hatteras - Barometric, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Springmaid Pier - Water Level, Springmaid Pier - Barometric, Oyster Landing (N Inlet Estuary) - Water Level, Charleston, Cooper River Entrance - Water Level, Charleston, Cooper River Entrance - Winds, Charleston, Cooper River Entrance - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



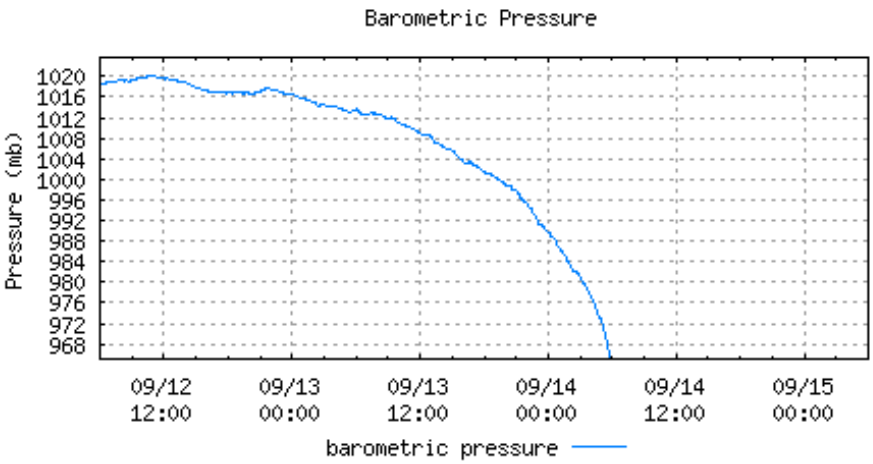
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -1.32 ft. Predicted: -4.00 ft. Residual: 2.68 ft.
Historical Maximum Water Level: Oct 4 2015, 2.97 ft.
Next High Tide: 09/14/2018 11:46 (EDT), 0.58 ft.

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



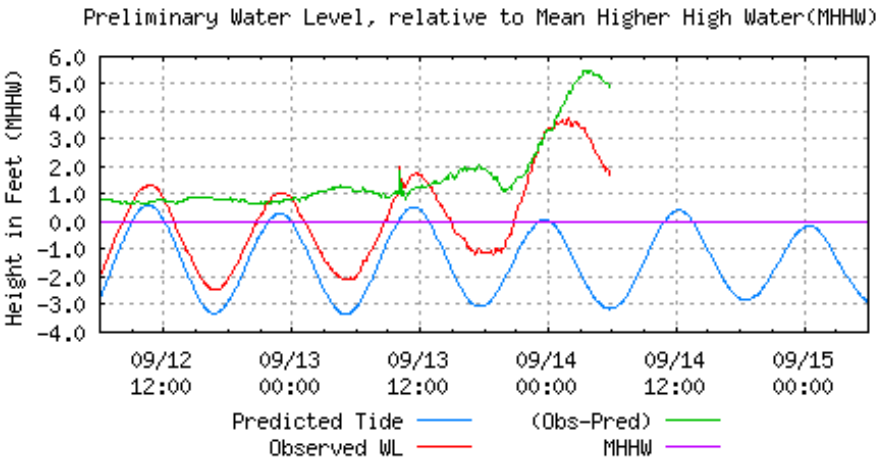
Last Observed Sample: 09/14/2018 05:54 (EDT)
Wind Speed: 52 knots Gusts: 73 knots Direction: 316° T

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



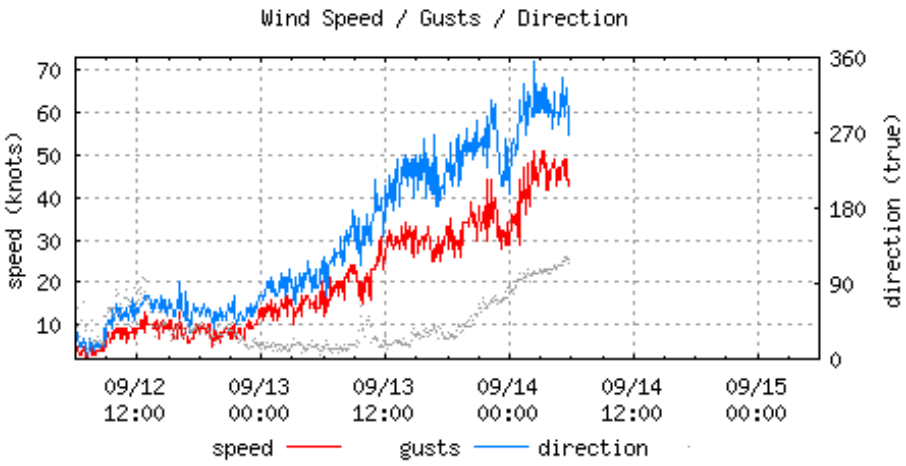
Last Observed Sample: 09/14/2018 05:54 (EDT)
Barometric Pressure: 964.7 mb

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



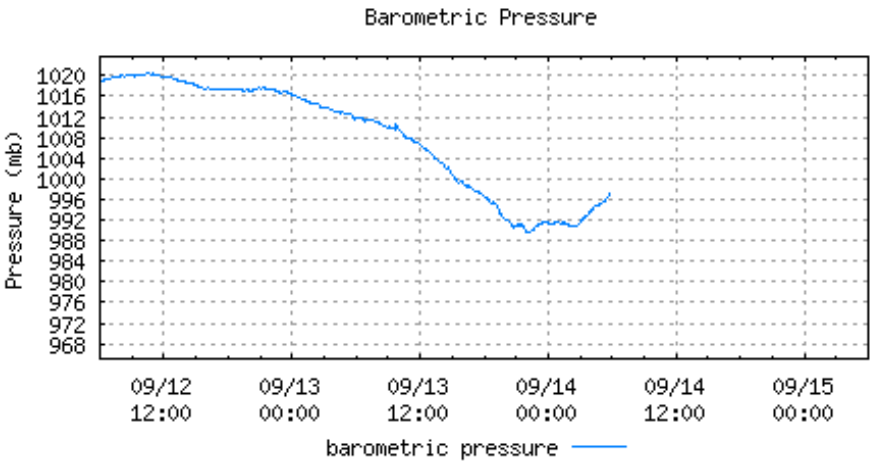
Last Observed Sample: 09/14/2018 05:48 (EDT). Data relative to MHHW
Observed: 1.72 ft. Predicted: -3.16 ft. Residual: 4.88 ft.
Historical Maximum Water Level: Sep 19 1955, 3.39 ft.
Next High Tide: 09/14/2018 12:14 (EDT), 0.44 ft.

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



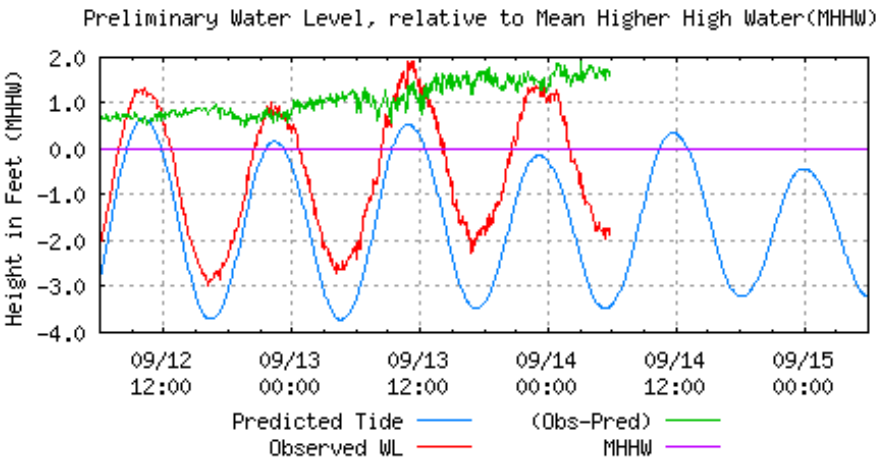
Last Observed Sample: 09/14/2018 05:48 (EDT)
Wind Speed: 44 knots Gusts: 55 knots Direction: 115° T

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



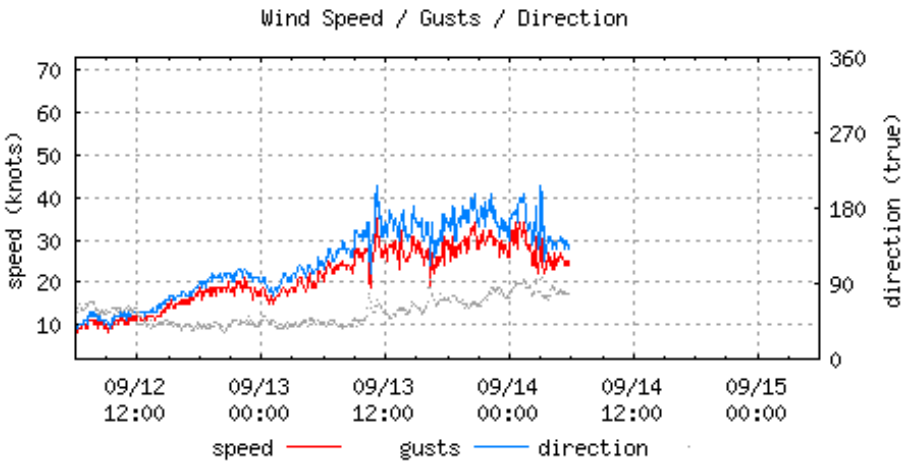
Last Observed Sample: 09/14/2018 05:48 (EDT)
Barometric Pressure: 997.0 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC



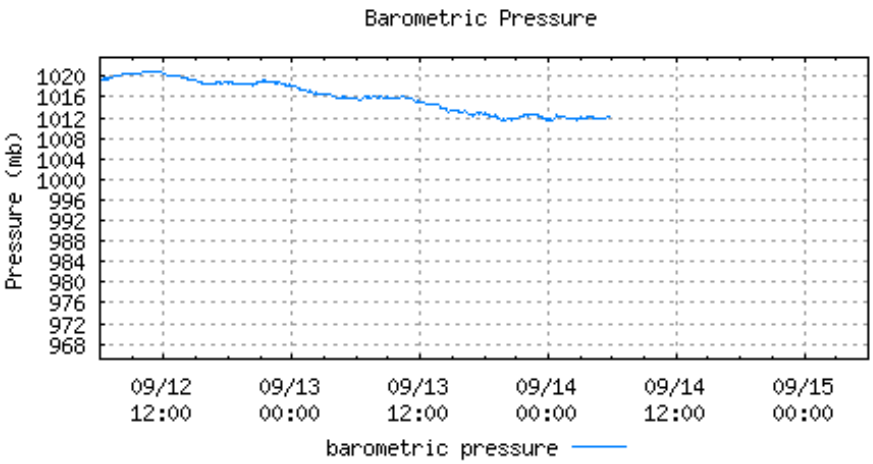
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -1.72 ft. Predicted: -3.42 ft. Residual: 1.70 ft.
Historical Maximum Water Level: Sep 18 2003, 4.13 ft.
Next High Tide: 09/14/2018 11:42 (EDT), 0.36 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC



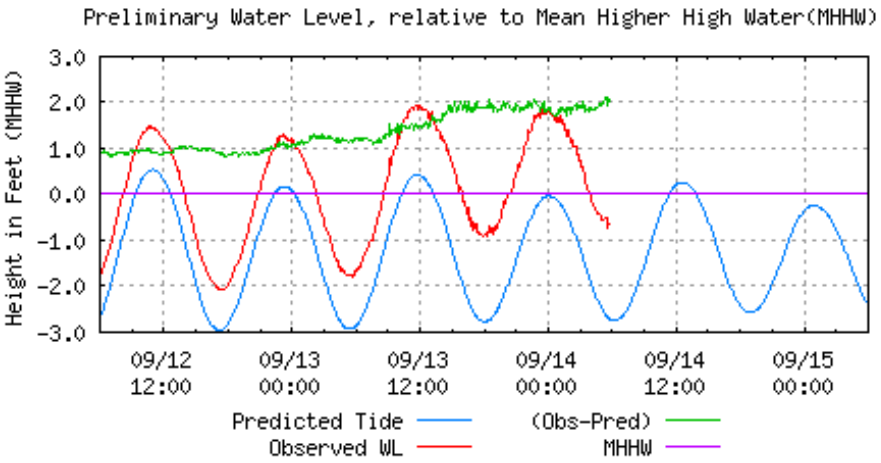
Last Observed Sample: 09/14/2018 05:54 (EDT)
Wind Speed: 24 knots Gusts: 29 knots Direction: 79° T

NOAA/NOS/CO-OPS 8651370 Duck, NC



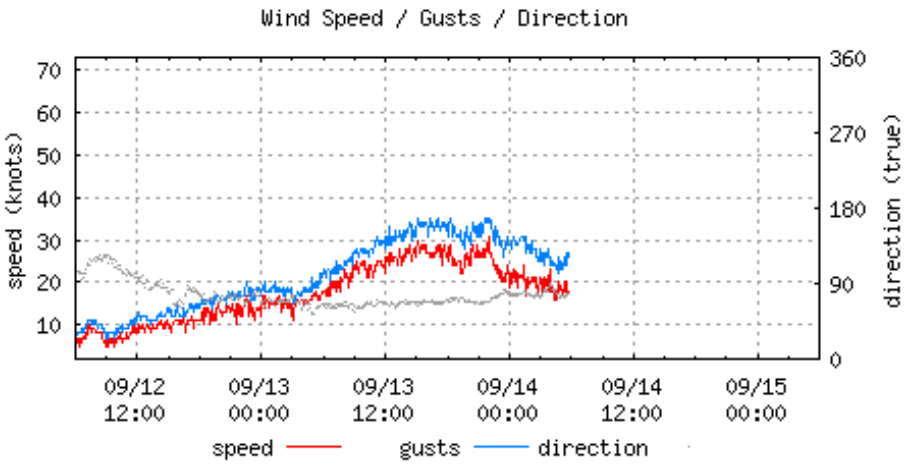
Last Observed Sample: 09/14/2018 05:54 (EDT)
Barometric Pressure: 1012.1 mb

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



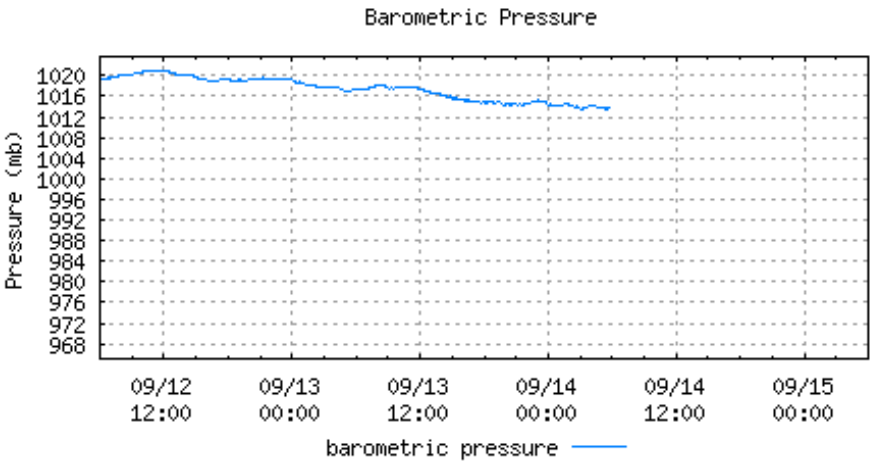
Last Observed Sample: 09/14/2018 05:48 (EDT). Data relative to MHHW
Observed: -0.71 ft. Predicted: -2.71 ft. Residual: 2.00 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/14/2018 12:32 (EDT), 0.26 ft.

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



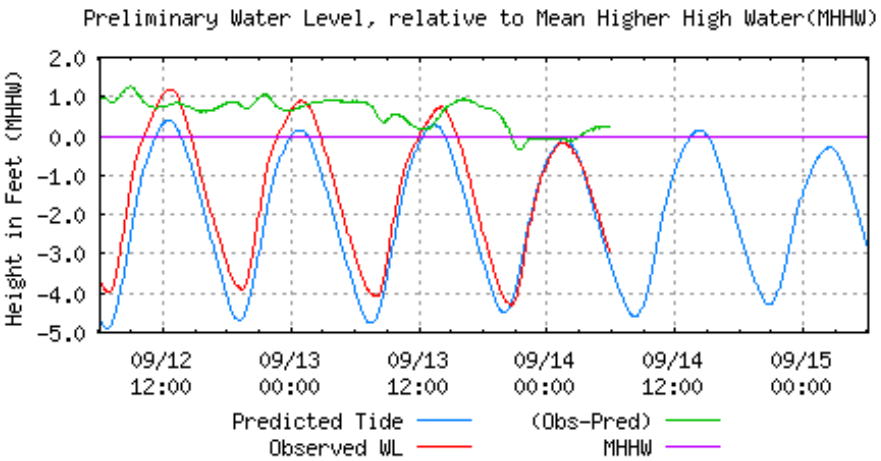
Last Observed Sample: 09/14/2018 05:48 (EDT)
Wind Speed: 17 knots Gusts: 27 knots Direction: 82° T

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



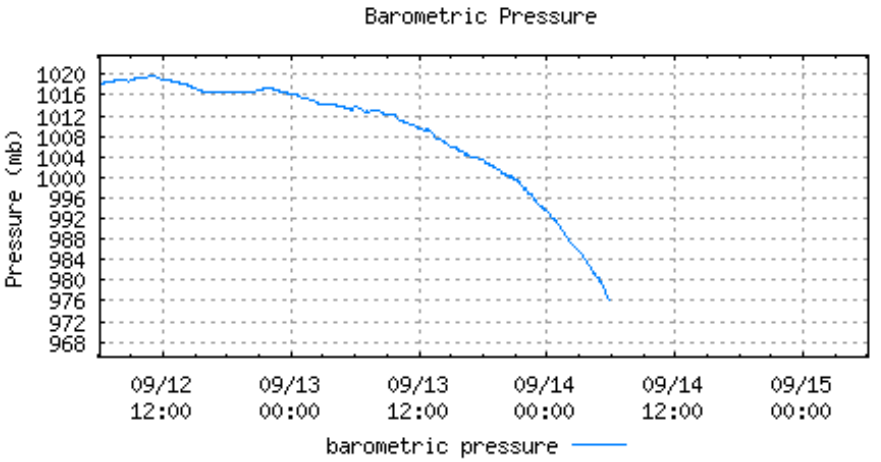
Last Observed Sample: 09/14/2018 05:48 (EDT)
Barometric Pressure: 1013.7 mb

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



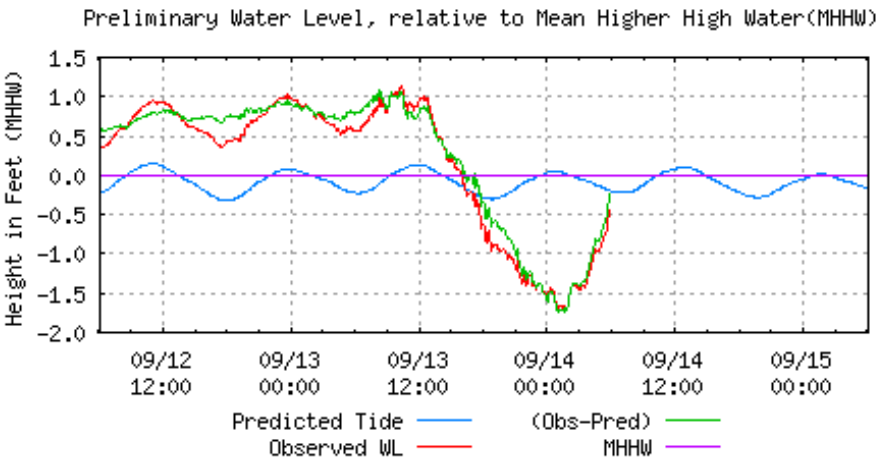
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -2.98 ft. Predicted: -3.24 ft. Residual: 0.26 ft.
Historical Maximum Water Level: Oct 8 2016, 3.48 ft.
Next High Tide: 09/14/2018 14:16 (EDT), 0.16 ft.

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



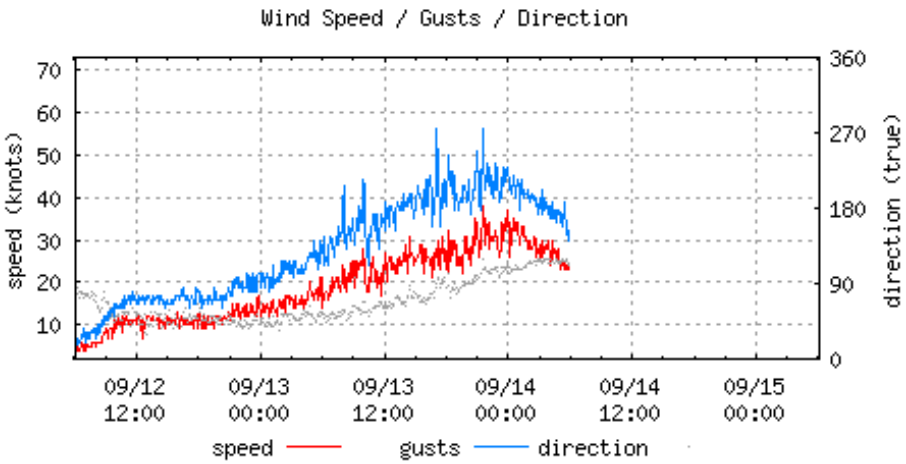
Last Observed Sample: 09/14/2018 05:54 (EDT)
Barometric Pressure: 975.2 mb

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



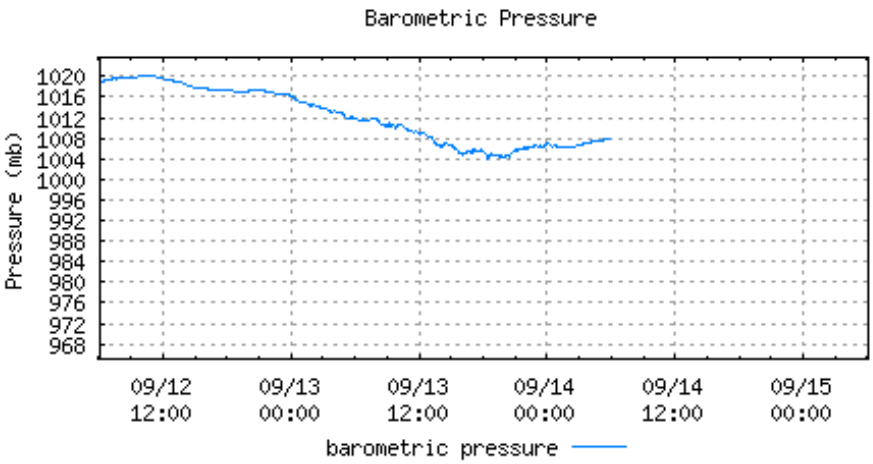
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -0.43 ft. Predicted: -0.19 ft. Residual: -0.24 ft.
Historical Maximum Water Level: Oct 9 2016, 5.76 ft.
Next High Tide: 09/14/2018 12:54 (EDT), 0.10 ft.

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



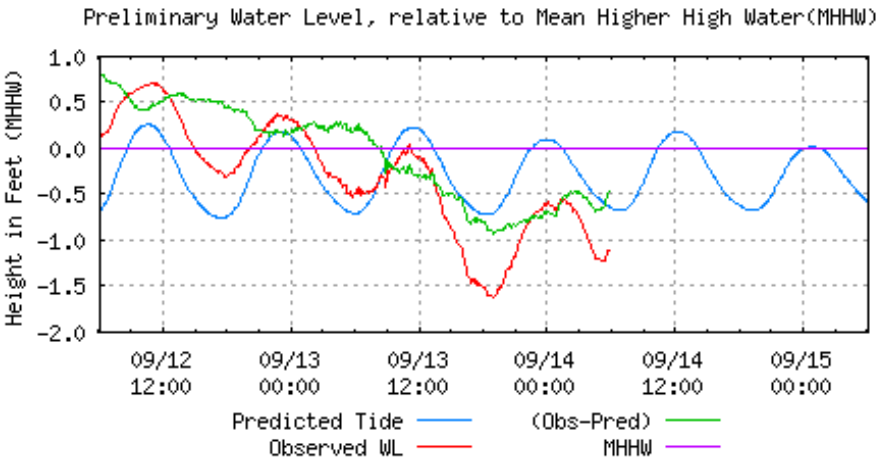
Last Observed Sample: 09/14/2018 05:54 (EDT)
Wind Speed: 23 knots Gusts: 32 knots Direction: 114° T

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



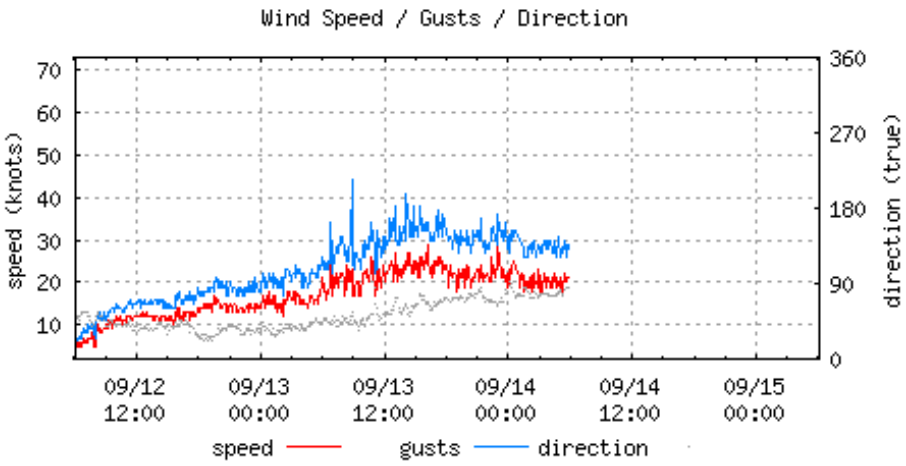
Last Observed Sample: 09/14/2018 05:54 (EDT)
Barometric Pressure: 1008.0 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



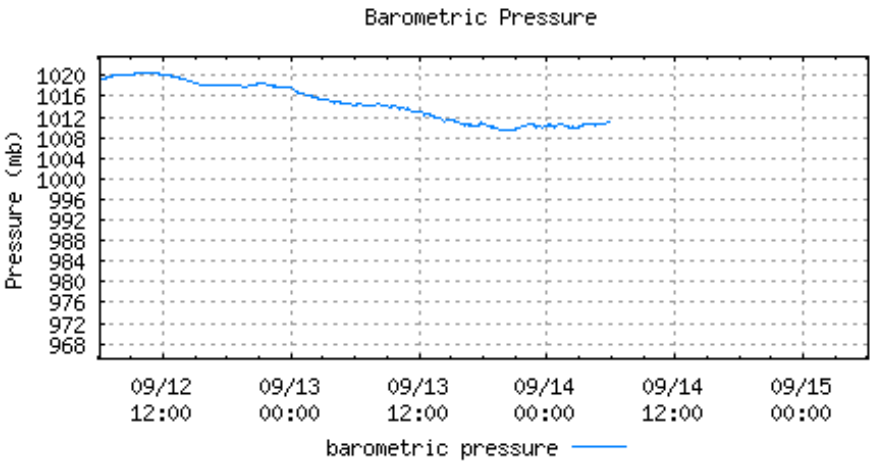
Last Observed Sample: 09/14/2018 05:48 (EDT). Data relative to MHHW
Observed: -1.10 ft. Predicted: -0.63 ft. Residual: -0.47 ft.
Historical Maximum Water Level: Aug 28 2011, 6.31 ft.
Next High Tide: 09/14/2018 12:17 (EDT), 0.18 ft.

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



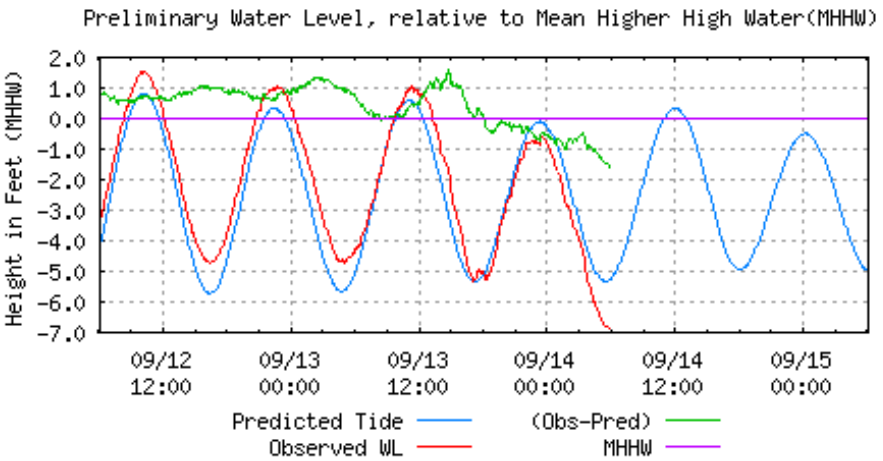
Last Observed Sample: 09/14/2018 05:48 (EDT)
Wind Speed: 21 knots Gusts: 29 knots Direction: 86° T

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



Last Observed Sample: 09/14/2018 05:48 (EDT)
Barometric Pressure: 1011.0 mb

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC



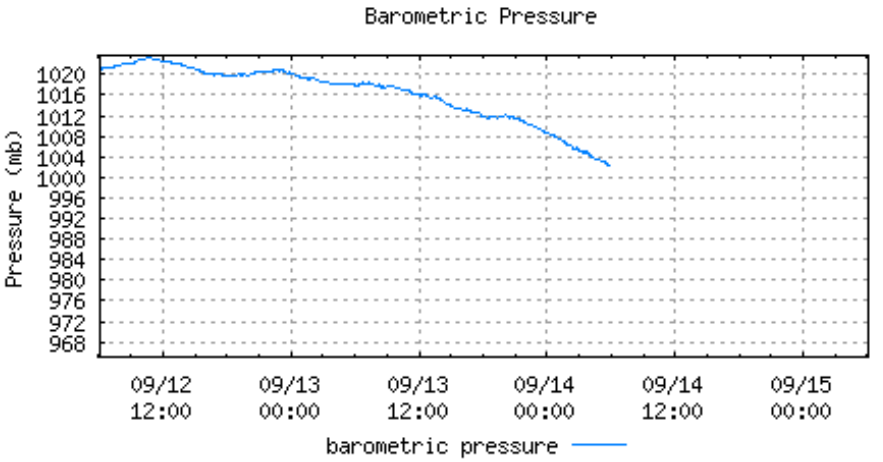
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW

Observed: -6.90 ft. Predicted: -5.27 ft. Residual: -1.63 ft.

Historical Maximum Water Level: Sep 21 1989, 8.77 ft.

Next High Tide: 09/14/2018 11:59 (EDT), 0.33 ft.

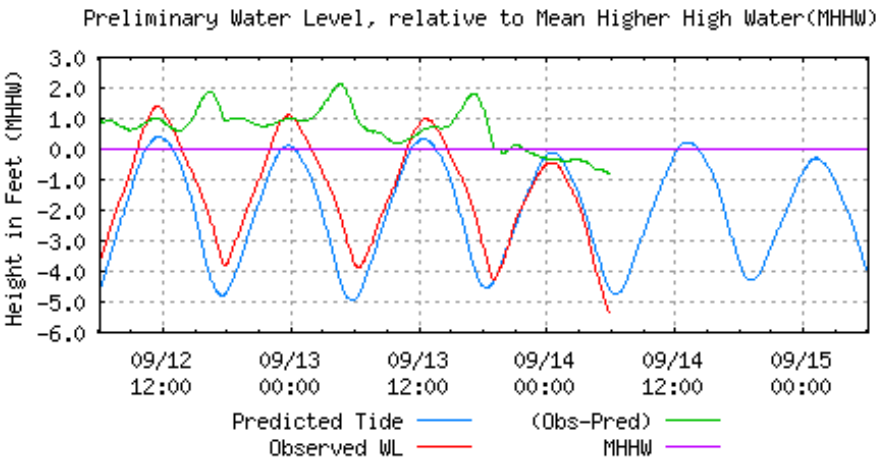
NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC



Last Observed Sample: 09/14/2018 05:54 (EDT)

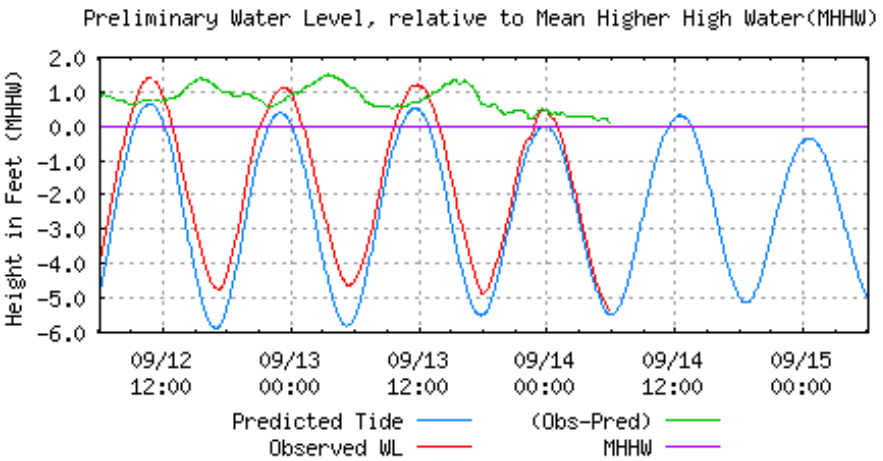
Barometric Pressure: 1002.3 mb

NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC



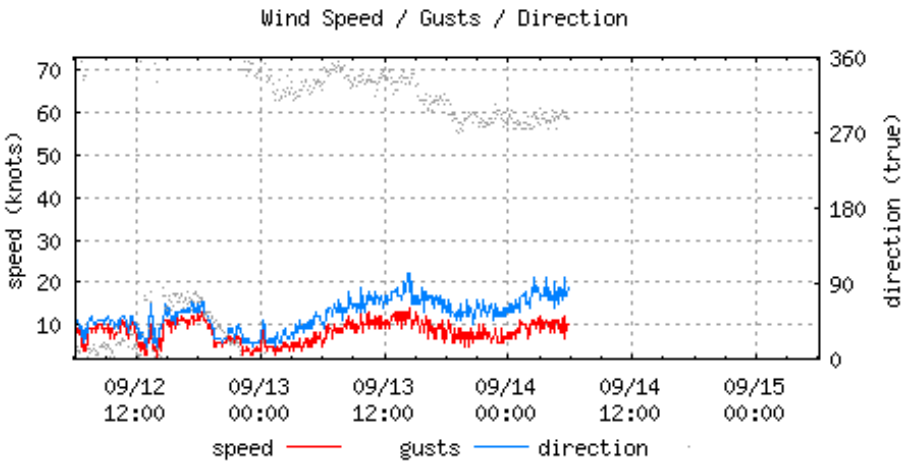
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -5.43 ft. Predicted: -4.61 ft. Residual: -0.82 ft.
Historical Maximum Water Level: Oct 8 2016, 4.64 ft.
Next High Tide: 09/14/2018 13:11 (EDT), 0.23 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



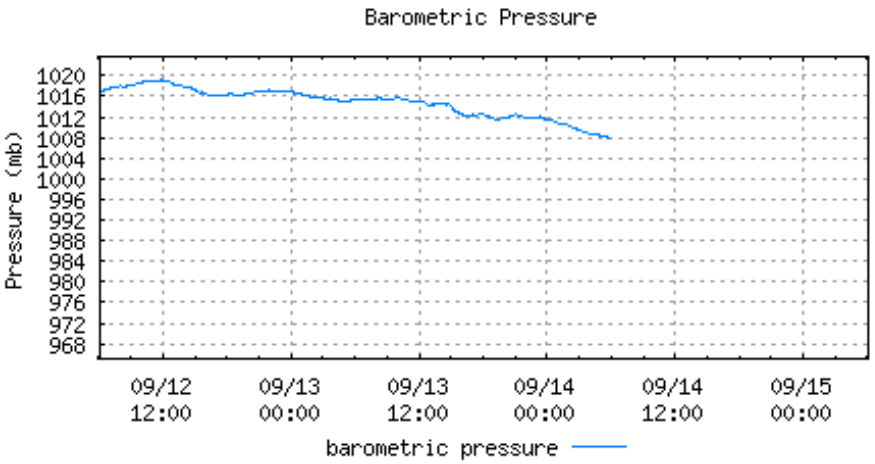
Last Observed Sample: 09/14/2018 05:54 (EDT). Data relative to MHHW
Observed: -5.41 ft. Predicted: -5.48 ft. Residual: 0.07 ft.
Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
Next High Tide: 09/14/2018 12:28 (EDT), 0.31 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



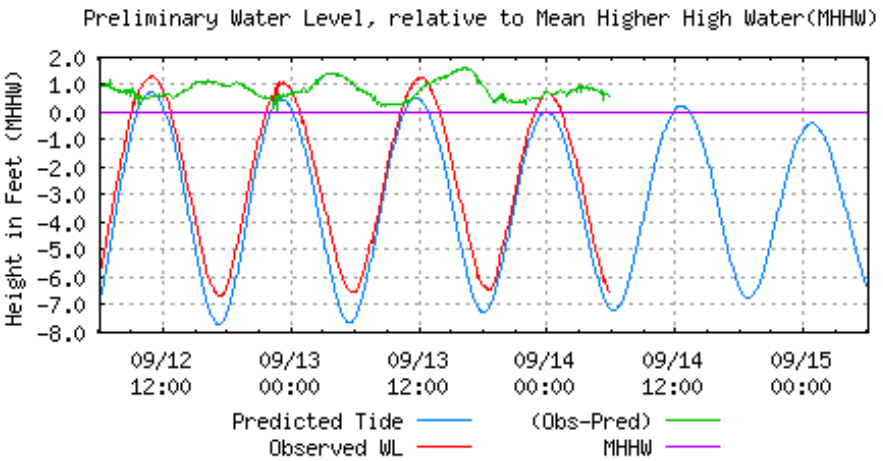
Last Observed Sample: 09/14/2018 05:54 (EDT)
Wind Speed: 8 knots Gusts: 17 knots Direction: 282° T

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



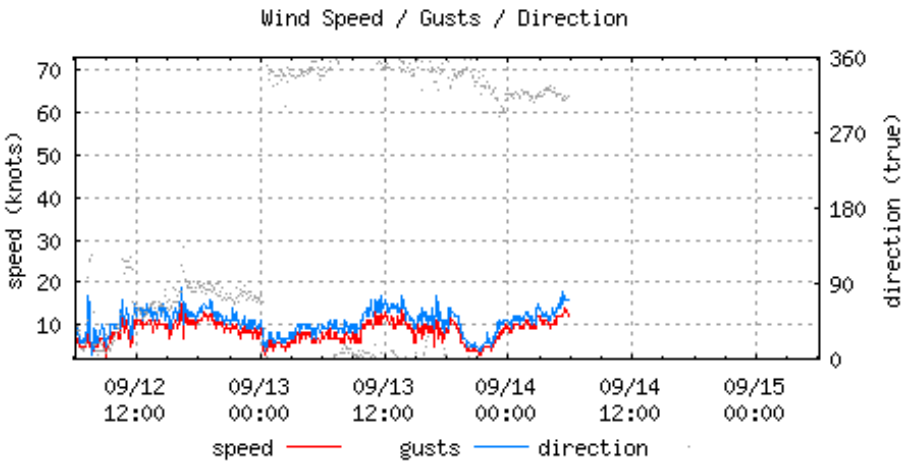
Last Observed Sample: 09/14/2018 05:54 (EDT)
Barometric Pressure: 1007.9 mb

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



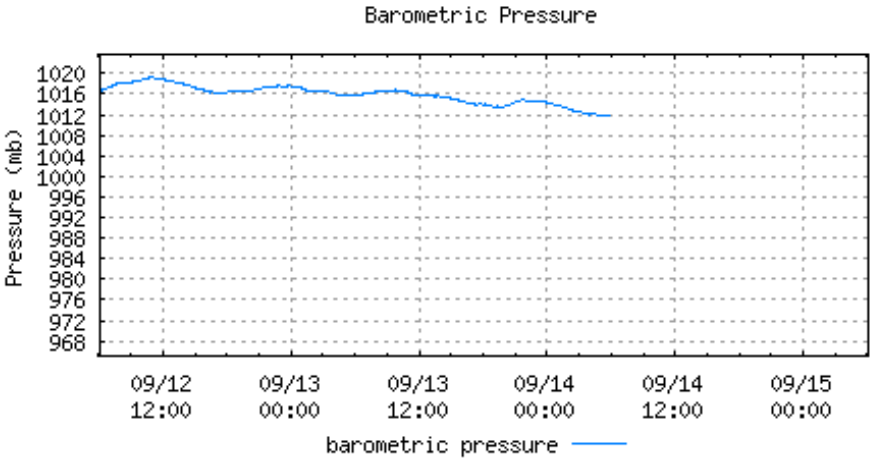
Last Observed Sample: 09/14/2018 05:48 (EDT). Data relative to MHHW
Observed: -6.53 ft. Predicted: -7.09 ft. Residual: 0.56 ft.
Historical Maximum Water Level: Oct 8 2016, 4.94 ft.
Next High Tide: 09/14/2018 12:36 (EDT), 0.24 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



Last Observed Sample: 09/14/2018 05:48 (EDT)
Wind Speed: 12 knots Gusts: 16 knots Direction: 314° T

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



Last Observed Sample: 09/14/2018 05:48 (EDT)

Barometric Pressure: 1011.7 mb

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8658163	Wrightsville Beach, NC	09/14/2018 05:54 (EDT)	-1.32 ft	-4.00 ft	2.68 ft	2.61 ft
8656483	Beaufort, Duke Marine Lab, NC	09/14/2018 05:48 (EDT)	1.72 ft	-3.16 ft	4.88 ft	3.74 ft
8651370	Duck, NC	09/14/2018 05:54 (EDT)	-1.72 ft	-3.42 ft	1.70 ft	1.93 ft
8638901	CBBT, Chesapeake Channel, VA	09/14/2018 05:48 (EDT)	-0.71 ft	-2.71 ft	2.00 ft	1.95 ft
8658120	Wilmington, NC	09/14/2018 05:54 (EDT)	-2.98 ft	-3.24 ft	0.26 ft	0.74 ft
8654467	USCG Station Hatteras, NC	09/14/2018 05:54 (EDT)	-0.43 ft	-0.19 ft	-0.24 ft	1.14 ft
8652587	Oregon Inlet Marina, NC	09/14/2018 05:48 (EDT)	-1.10 ft	-0.63 ft	-0.47 ft	0.05 ft
8661070	Springmaid Pier, SC	09/14/2018 05:54 (EDT)	-6.90 ft	-5.27 ft	-1.63 ft	1.05 ft
8662245	Oyster Landing (N Inlet Estuary), SC	09/14/2018 05:54 (EDT)	-5.43 ft	-4.61 ft	-0.82 ft	0.99 ft
8665530	Charleston, Cooper River Entrance, SC	09/14/2018 05:54 (EDT)	-5.41 ft	-5.48 ft	0.07 ft	1.21 ft
8670870	Fort Pulaski, GA	09/14/2018 05:48 (EDT)	-6.53 ft	-7.09 ft	0.56 ft	1.28 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
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